

**Correction:**

The Bureau Director's Column appearing in the **November 2002** issue of the *Bulletin* contains an error. The quote in the first paragraph citing the provisions of the Michigan Occupational Code should read "a heater or utility room, a crawl space, a basement, an attic, a garage, an open porch, a balcony, a terrace, a court, a deck, a bathroom, a toilet room, a closet, a hallway, a storage space, and other similar spaces not used for living, sleeping, eating, or cooking."

The Bureau regrets any inconvenience this may have caused.



# BULLETIN

Volume 8, Issue 1

November 2002

## DIRECTOR'S COLUMN

**Henry L. Green**

### Sealed Plans for One-and Two-Family Dwellings

Michigan Law has changed the requirements for sealed plans for one-and two-family dwellings. Governor Engler signed Enrolled House Bill 5819 into law on July 3, 2002, as Act No. 495. This amendatory act changed the requirements of the Michigan Occupational Code, 1980 PA 299, to incorporate a definition for habitable space. The act defines habitable space as not including "a heater or utility room, a crawl space, a basement, an attic, a garage, an open porch, a balcony, a terrace, a court, a deck, a bathroom, a toilet room, a closet, a hallway, a storage space, and other similar spaces used for living, sleeping, eating, or cooking." As a result, basements are no longer included in the calculation of square footage for purposes of determining whether sealed plans are required under the State Construction Codes.

Technical Bulletin Number 3, issued on December 1, 1990, concluded that basements which are unfinished and not habitable, by definition of the code, were not considered in the calculated floor area of a one-and two-family dwelling for purposes of requiring plans prepared and sealed by a licensed design professional. Where a basement was finished or was deemed to be habitable, it was included in the calculation for purposes of determining when sealed

*(Continued on Page 2)*

### Cylinder Protection

*by Calvin W. Rogler, Chief  
Elevator Division*

It has been brought to the attention of the Elevator Safety Division that occasionally elevator journeypersons are not removing the water from the required steel casing when setting the hydraulic elevator cylinder.

Rule 408.8636a states, in part:

"An outer cylinder casing is required on a new hydraulic elevator or where a cylinder is being replaced. The **steel casing** shall have a wall thickness that is not less than 3/8 of an inch. An expandable-type concrete plug shall be poured in the bottom of a casing or a welded plate closer shall be provided and **water removed**. Dry nonconductive material, if needed, shall be provided between a cylinder and its casing to secure the position of the cylinder." *[emphasis added]*

This rule makes it very clear that water must be removed from the area between the casing and cylinder. On April 11, 1989, Contractors Bulletin 89-2 was issued requiring the inspection of the dry casing before the cylinder could be installed or the casing capped. These dry casing inspections had to be scheduled through this office. After a period of time it became unnecessary to require these casing inspections as everyone was complying with the requirements.

More recently, however, companies are using polyvinyl chloride (PVC) cylinder liners. The Elevator Safety Division has approved the use of some of these PVC liners as long as they are used with the required steel casings. Of the PVC liners available, some have monitoring systems and others do not. During several inspections, PVC liners were found to be damaged and allowed water to enter the area next to the cylinder. Manufacturers have tried to design systems that monitor the area between the PVC liner and cylinder. If these systems are not installed properly or are damaged, the ability to monitor is lost. The use of a PVC liner still requires the removal of the water from the steel casing.

If the Elevator Safety Division continues to find non-compliance with Rule 408.8636a where water is not being removed prior to backfilling with dry nonconductive material, an inspection of the dry casing will be required before the cylinder is installed or the casing capped. The required casing inspection will have to be scheduled through this office and the contractor will be assessed a special service fee of \$50.00 per hour, including travel time for the inspection.

Questions may be directed to the Elevator Safety Division at 517/241-9337.



"Serving Michigan . . . Serving You"

*Director's Column, continued...*

plans were required. Act No. 495 changes this. It no longer matters whether the basement is habitable or not. Basements are now excluded from the calculation.

The law does not include a definition of basement. Therefore, reliance is given to the Michigan Building Code to make this clarification for purposes of application of the provisions of construction codes with respect to submission of plans.

Section R106.1 of the Michigan Residential Code provides, in part:

"The construction documents shall be prepared by or under the direct supervision of a registered design professional when required by article 20 of 1980 PA 299, MCL 339.101 et seq. and known as the Michigan occupational code."

*A "Basement" is defined as:*

"That portion of a building that is partly or completely below grade (see "Story above grade")."

*A "Story Above Grade" is defined as:*

"Any story having its finished floor surface entirely above grade, except that a basement shall be considered as a story above grade where the finished surface of the floor above the basement is:

1. More than 6 feet (1829 mm) above grade plane.
2. More than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter.
3. More than 12 feet (3658 mm) above the finished ground level at any point."

*"Grade Plane" is defined as:*

"A reference plane representing the average of the finished ground level adjoining the building at all exterior walls."

Basements must, however, comply with all of the provisions of the code for the intended use. If a basement includes habitable space, the space must meet all of the provisions of the code for habitability. Additionally, all other requirements of the code are applicable. This includes structural stability, lighting, height, ventilation, interior finishes, and means of egress.

Section R106.1 also provides:

"Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional."

This section of the code was intended to allow code officials the ability to require additional information to substantiate a particular design or where the design incorporates unusual construction techniques or unconventional construction methods. It was not intended to give a code official the license to require additional construction documents because the basement increases the square footage above the threshold for submission of sealed plans.

Code officials are not charged with the application of the Michigan Occupational Code, but rather are charged with the responsibility to ensure compliance with

the codes. This includes the submission of sealed plans prepared by a licensed design professional when required by the code.

Specific interpretations of the Michigan Occupational Code are the responsibility of the Bureau of Commercial Services.

Questions regarding the applicability of the State Construction Codes and the codes' requirements for submission of sealed plans may be directed to the Plan Review Division at 517/241-9328.

## Michigan Rehabilitation Code for Existing Buildings

The Bureau of Construction Codes has finalized the rulemaking process to promulgate the Michigan Rehabilitation Code for Existing Buildings. The rules became effective October 31, 2002. The rules adopt the International Existing Building Code, 2003 final draft, dated August 2001.

This document may be purchased from the bureau at a cost of \$10.00. The cost of the book includes the Michigan amendments, which may be purchased separately for \$2.50. The amendments have been mailed to the clerks of each unit of government in Michigan. The code and the amendments may also be downloaded from the bureau web site at [www.michigan.gov/cis](http://www.michigan.gov/cis), Construction Codes and Fire Safety, Administrative Rules and Public Acts.

To purchase either document, please download a Codes and Standards Order Form from the Featured Services Section on the home page of the bureau's web site at [www.michigan.gov/cis](http://www.michigan.gov/cis), Construction Codes and Fire Safety, or call 517/241-9313 to request the form.

Questions regarding the Michigan Rehabilitation Code for Existing Buildings may be directed to 517/241-9302.

BULLETIN

BUREAU OF  
CONSTRUCTION  
CODES

MICHIGAN DEPARTMENT  
OF CONSUMER &  
INDUSTRY SERVICES

The BULLETIN is a quarterly publication of the Bureau of Construction Codes within the Michigan Department of Consumer & Industry Services. The BULLETIN is published for the information of the 64,000 plumbers, electricians, mechanical contractors, boiler and elevator licensees, plan reviewers, building officials, inspector registrants, manufactured home communities, installer/servicers, and retailers throughout the state.

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## Boiler Repair Permitting and Authorization

by Robert J. Aben, Jr., Chief  
Boiler Division

**SPECIAL NOTICE:  
APPROVAL OF A BOILER  
INSTALLATION PERMIT FROM THE  
STATE DOES NOT NEGATE THE  
REQUIREMENT TO APPLY FOR  
OTHER LOCAL OR STATE AGENCY  
PERMITS FOR WORK OUTSIDE THE  
JURISDICTION OF THE BOILER  
LAW, i.e., PLUMBING,  
MECHANICAL, ELECTRICAL**

A repair licensee is required to secure a permit to repair a boiler prior to commencing repairs. Section 18 of the boiler law allows a repair to commence prior to issuance of the permit if the repair is an emergency and is authorized by a licensed inspector.

Rule 408.4627 addresses routine repairs. This rule grants a repair licensee, under certain provisions within the rule, to start repairs of a routine nature with prior authorization by a licensed inspector. It should be noted that authorization of a routine repair by one inspector for a specific location is not a blanket authorization for that type of repair at any other location or any other inspector's territory. Individual inspectors should be contacted to determine which routine repairs he/she would authorize. The name of the inspector who authorized the repair shall appear on the repair permit application form, BCC-849.

Questions regarding these requirements may be directed to the Boiler Division at 517/241-9334.

### Holiday Closings

State offices will be closed in observance of the following holidays:

November 11 - Veterans Day  
November 28 & 29 - Thanksgiving  
December 24 & 25 - Christmas  
December 31 & January 1 - New Years  
January 20 - Martin Luther King, Jr. Day

## Scheduled Board Meetings

<u>MEETING</u>	<u>DATE</u>	<u>TIME</u>	<u>LOCATION</u>
State Plumbing Board	Dec. 3	10:00 a.m.	Okemos-Conf. Room 2
Board of Boiler Rules	Dec. 10	9:30 a.m.	Okemos-Conf. Room 1
Manufactured Housing Commission	Dec. 11	10:00 a.m.	Okemos-Conf. Room 3
Electrical Administrative Board	Dec. 20	9:30 a.m.	Okemos-Conf. Room 1
Construction Code Commission	Jan. 8	9:30 a.m.	Okemos-Conf. Room 3
Barrier Free Design Board	Jan. 10	9:30 a.m.	Okemos-Conf. Room 1
State Plumbing Board	Jan. 15	10:00 a.m.	Okemos-Conf. Room 2
Manufactured Housing Commission	Jan. 22	10:00 a.m.	Okemos-Conf. Room 3

Okemos - 2501 Woodlake Circle, Okemos

Please Note: All meeting dates for 2003 have not been finalized. Please contact the respective division or refer to the bureau's website ([www.michigan.gov/cis](http://www.michigan.gov/cis)) in December to obtain meeting dates and locations.

## License Examination Schedule

<u>EXAMINATION</u>	<u>DATE</u>	<u>LOCATION</u>	<u>DEADLINE</u>
Please Note: Examination schedules for 2003 have not been finalized. Please contact the respective division or refer to the bureau's website ( <a href="http://www.michigan.gov/cis">www.michigan.gov/cis</a> ) in December to obtain examination dates and locations.			

## Plumbing Examination Application Submissions

by Robert G. Konyndyk, Chief  
Plumbing Division

Master and journey plumbing examinations are typically scheduled at least five times a year. In the past, schedules have been published with location, board meeting dates, and deadline dates. Please be advised that the Plumbing Division processes applications continually. Individuals waiting for the deadline run the risk of not allowing adequate processing time. Processing time involves many considerations, i.e., verifying the authorized master plumber's company timeframe to match the applicant's work history, good moral character processing time, etc. It is advisable to submit applications promptly following completion of the minimum licensing requirements.

Apprentice registration and journey and master examination applicants are reminded to complete applications as accurately as possible. Several applicants have forfeited their rights of consideration by not accurately answering the conviction background information required by the plumbing law, as stated on each application.

Questions may be directed to the Plumbing Division at 517/241-9330.

## Authorized Master Plumbers Obtaining Permits

by Robert G. Konyndyk, Chief  
Plumbing Division

Recent license investigations indicate that some authorized master plumbers believe they can designate another individual as having the authority to obtain permits in their name.

This would be similar in assuming another individual could use your driver's license for vehicle operation or identification. The plumbing law, 1929 PA 266, and Rule 408.30792 prohibit anyone other than the authorized master plumber from signing the permit applications. Inspection agencies are encouraged to verify permit applicants with their registration lists.

Questions may be directed to the Plumbing Division at 517/241-9330.

## Pre-Manufactured and Manufactured Home Inspections

by *Larry Lehman, Chief  
Building Division*

The Bureau of Construction Codes receives many inquiries relative to the inspections of manufactured homes. Typically, there are two types of manufactured homes installed in Michigan:

1. State of Michigan premanufactured units are built in accordance with the Premanufactured Unit General Rules, Part 11 of the State Construction Codes.

2. Manufactured homes are constructed to the Manufactured Home Construction and Safety Standard administered by the U.S. Department of Housing and Urban Development (HUD).

Both types of manufactured homes are referenced by the Stille-DeRossett-Hale Single State Construction Code Act (Act). Section 2 of the Act provides the following definition:

"Premanufactured unit means an assembly of materials or products intended to comprise all or part of a building or structure, and which is assembled at other than the final location of the unit of the building or structures by a repetitive process under circumstances intended to insure uniformity of quality and material content. Premanufactured unit includes a mobile home."

Section 8a(7) states:

"The standards for premanufactured housing shall not be less than the standards required for nonpremanufactured housing, except that manufactured homes labeled pursuant to the national manufactured housing construction and safety standards act of 1974, title VI of the housing and community development act of 1974, Public Law 93-383, 42 U.S.C. 5401 to 5426, shall be considered to have complied with this requirement."

Thus, both a state premanufactured unit and a HUD approved unit shall be considered to comply with the provisions of the Act.

Rule 1142 of the Part 11 Premanufactured Unit Rules provides the enforcing agency the procedures and inspections applicable to state premanufactured units, and states that the enforcing agency shall issue building

permits for certified premanufactured units when the unit complies with all applicable construction codes. An application to an enforcing agency in addition to any other regulation shall include copies of the building system approval report and the approved building system (plans, specifications, and documentation for a type or system of building components). Having the documents for review will assure the code official that the premanufactured home is approved for the intended specific site and what equipment or components were part of the approval. The on-site inspection of the premanufactured unit shall include the foundation system, set-up, site built construction, and all electrical, mechanical and plumbing connections. All work performed on site is subject to the requirements of the Michigan Codes by the local enforcing agency.

The on-site inspection of HUD approved manufactured homes shall include the foundation systems (except within a manufactured home park); tie downs; set-up; site built construction; such as porches, decks, accessory structures; and all electrical, mechanical, and plumbing connections. It is important to note that this type of home is constructed to the Manufactured Home Construction and Safety Standard, and enforcing agencies are not authorized to invoke a higher standard on HUD approved homes. Site built construction, such as the foundation system, is subject to the State Construction Codes, the manufacturer's foundation plans, and the manufacturer's installation instructions.

Questions regarding these requirements may be directed to the Building Division at 517/241-9317.

### Bureau Inspector Training February 11-13, 2003

The bureau will be conducting its annual training for management and inspection staff from February 11-13, 2003. Administrative support staff will be in the office and available to answer questions and take messages. Management staff will be in contact with the office on a daily basis. Any call which warrants immediate attention will be returned. Please work with inspection staff to schedule inspections before or after the training dates.

## State Sponsored Inspector Training Programs for 2003

by *Scott D. Fisher  
Office of Local Government and Consumer Services*

The Bureau will again be conducting building, electrical, mechanical, and plumbing inspector training programs at the MacMullan Conference Center (Higgins Lake). The following dates have been scheduled for 2003:

### Building Inspector Training Program (Two-Week Program) - NO VACANCIES

1<sup>st</sup> week: December 2 - 6, 2002

2<sup>nd</sup> week: January 27 - January 31, 2003

### Electrical Inspector Training Programs

March 3 - 5, 2003

September 24 - 26, 2003

### Mechanical Inspector Training Programs

February 24 - 26, 2003

October 20 - 22, 2003

### Plumbing Inspector Training Programs

April 2 - 4, 2003

October 6 - 8, 2003

### Building Inspector Training Program (Two-Week program)

1<sup>st</sup> week: December 8 - 12, 2003

2<sup>nd</sup> week: January 26 - 30, 2004

These programs will be available to inspectors with all levels of experience. Agendas are not yet available, but generally consist of administrative, communications, specialty, technical, and may include plan review hours.

Each seminar will accommodate 35 individuals. Please contact Evie Livingston at (517)241-9347 to reserve a place for the seminar of your choice. If the seminar is full, your name will be placed on a waiting list. As the scheduled dates approach, confirmation of your reservation will be provided along with an agenda and payment information.

Find us at [www.michigan.gov/cis](http://www.michigan.gov/cis)



## Accessibility and Existing Structures

by Irvin J. Poke, Chief  
Plan Review Division

The state Barrier Free Design Act, 1966 PA 1, incorporates accessibility into the building code and prescribes the enforcement to the local building departments. The act does not require buildings that existed before July 1975 to be brought into compliance until they undergo alteration or a change in use.

An alteration is the physical rearrangement or addition of space and building elements. The repair, removal or replacement of finishes and fixtures are not considered alterations. A building owner may repair finishes or completely remove and replace them and will not be subject to the requirements of accessibility. This also holds true for the removal and replacement of kitchen and bathroom fixtures, as long as they are not relocated.

The change in use is based on the use group classifications in the Michigan Building Code (MBC). Change of ownership is not considered a change in use. If a building classified for mercantile use changes ownership; however, the building continues to be used for mercantile purposes, there is no change of use; therefore, accessibility requirements may not be applied. It does not matter that the type of merchandise may change, such as shoes to electronics. If the same building is transformed to a use that offers professional services, it has undergone a change from a mercantile (M) to business (B) use. Under this circumstance, the accessibility requirements are applicable, even if no alteration is performed.

Under the state statute, 1966 PA 1, section 2, the level of compliance is determined by the percentage of the total square feet of the facility involved in the alteration or change in use. If the area involved is less than 50% of the total area of the facility, the accessibility requirements are applied to the area altered and a route to that area from the nearest entrance. If the area involved is 50% or more, the building would be subject to the requirements of accessibility as if it were new construction.

Existing structures that are private residences with not more than three dwelling units are exempt from

compliance. An existing structure with four or more dwelling units of a non-residential use would be required to comply if altered or involved in a use change. The MBC provides some automatic relief for existing buildings under section 3408. Compliance for existing residential buildings is based on the number of units altered. For example, if three units are altered, no compliance is required. If four or more units are altered, compliance is based on the number of units altered, not on the total number of units in the building. Refer to MBC section 3408.7.8.

The accessibility requirements apply to all buildings except private one-and two-family dwellings, utility, and high hazard structures. However, the state Barrier Free Design statute provides for the granting of exceptions to the accessibility requirements by the state Barrier Free Design Board. When a building owner demonstrates one or more reasons of compelling need, the board may grant a special exception to deviate from or waive the requirements altogether. The statute identifies structural limitations, economical hardship, practicable difficulty, jurisdictional conflict, and historical structures as reasons of compelling need.

Many existing buildings may qualify for an exception for two or more of these reasons. However, it is the owner's burden to present credible evidence of compelling need. In using the reason of historical structure, evidence that compliance with the accessibility requirements would destroy the historical significance must be presented.

Questions may be directed to the Plan Review Division at 517/241-9328.

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## Electrical Work Performed by Other Licensees

by Stella Morris, Chief  
Electrical Division

Recently, several individuals have asked bureau staff whether a mechanical contractor or authorized master plumber, without an electrical license, may perform work relating to electrical installations.

Section 7(3)(i) of the Electrical Administrative Act, Act No. 217, PA 1956 governs the installation of electrical control wiring on new equipment installed in existing mechanical systems.

This section of the law provides for an exception for mechanical contractors "...while performing maintenance, service, repair, replacement, alteration, modification, reconstruction, or upgrading of control wiring circuits and electrical component parts within existing mechanical systems defined in the mechanical and plumbing codes..." This section of the law clearly prohibits mechanical and plumbing licensees from performing work on life safety system wiring. Further, this section provides the work must be performed on the load side of the disconnect which is located on or immediately adjacent to the equipment.

It is important to note that work permitted to be performed by mechanical contractors and authorized master plumbers is restricted to existing systems. A mechanical contractor may replace a component within an existing heating system. As an example, a contractor may replace a furnace provided the work does not involve rewiring the electrical branch circuits serving the furnace and the installation of new control wiring, i.e., temperature controls.

Work beyond the disconnect located on or adjacent to the equipment within existing systems would be required to be performed by a licensed electrical contractor.

When an air conditioning unit is added to an existing HVAC system, the electrical wiring for the new equipment must be performed by a licensed electrical contractor. A mechanical contractor may replace a motor within an existing system or an existing compressor.

Existing pneumatic control systems may be modified, upgraded, or replaced by a mechanical contractor. However, when an existing pneumatic system is abandoned and replaced with a new electrical control system, it must be installed by a licensed electrical contractor.

Questions may be directed to the Electrical Division at 517/241-9320.

Note: This article is a reprint from the May 1998 Bulletin, contributed by Tom Kriegish, former Electrical Division Chief. It has been reprinted for clarification to contractors and inspectors. Rule 90-13 of the Part 8 Amendments allows permits to be issued to licensed mechanical and plumbing contractors for the work described above. The permit would be issued for an energy retrofit.

**Mechanical Inspectors and Kitchen Ventilation**

*by Tennison B. Barry, Chief  
Mechanical Division*

In November 2000, Act 92, the Food Law of 2000 (Act) went into effect. The law removed the construction requirements for the installation of kitchen hoods from the health department rules, however, the law did not remove the requirements pertaining to ventilation testing, ventilation balance reports, and ventilation smoke testing.

Additionally, in June 2002, portions of the law were changed by removing the requirement that local health departments perform kitchen ventilation and smoke tests and require the submission of balance reports. Although portions of the law have been changed to no longer require local health departments to perform the tests, local health departments retain the option to perform one or more of the tests.

How will you know whether or not the local health department is still performing the tests? Local health departments would have to be contacted to determine what tests they intend to perform prior to the issuance of a license to a food establishment.

With the passing of this legislation, it is important that the mechanical inspector assure the tests are performed. The code does not indicate what, if any, credentials are required to be certified as an air balancing contractor. As the bureau promulgates the next code, this issue will be addressed. However, at this time I would recommend acceptance of a contractor who demonstrates the ability to perform the tests.

In conclusion, inspectors should be working with the local health departments in the inspection of all food establishments. It is recommended that inspectors set up a meeting with the local health department and discuss the best way to work together.

Questions regarding these requirements may be directed to the Mechanical Division at 517-241-9325.

**Manufactured Housing Commission and Licensing  
Functions Transferred**

As a result of the retirement of Richard VanderMolen, the Manufactured Housing Commission responsibilities have been transferred to the bureau's Building Division located in the Okemos office. The chief of the Building Division, Larry Lehman, will be responsible to oversee activities of the Commission. Brenda Caron transferred to the division on November 1, 2002, and serves as Larry's secretary and continues her secretarial responsibilities to the Manufactured Housing Commission. Larry and Brenda may be reached at 517/241-9317.

Manufactured Housing licensing responsibilities will also be transferred to the division. Deb Norris will continue to handle licensing responsibilities and may be reached at 517/241-6310.

**Bureau Move**

The bureau has received approval to begin the process of designing additional space in the Okemos office to accommodate staff currently located at the Mercantile office. Because this move involves other agencies, it may take a few months to accomplish. Office of Local Government and Consumer Services as well as Subdivision Control and Remonumentation staff will be relocated to the Okemos office. Once this move is complete, all staff, with the exception of field inspectors, will be located at the Okemos office at 2501 Woodlake Circle ( telephone numbers will remain the same).

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